

ABSTRACT OF THE DISCLOSURE

A transceiver (100) such as used in Discrete Multitone (DMT) modulation of digital signals for communication, such as in a DSL modem communications system, is described. The transceiver (100) includes a function (119) by way of which unloaded subchannels are encoded with a clip prevention signal. The clip prevention signal is derived to avoid clipping by an amplifier (18) after modulation into the time domain, upsampling, and filtering. The effects of the upsampling and filtering are considered in deriving the clip prevention signal, by considering the upsampling and filtering as a polyphase combination, and using the filter response for each phase. Frequency domain and time domain update alternatives are disclosed.